



# *THE GOVERNANCE GAP: CLIMATE ADAPTATION AND SEA-LEVEL RISE IN THE SAN FRANCISCO BAY AREA*

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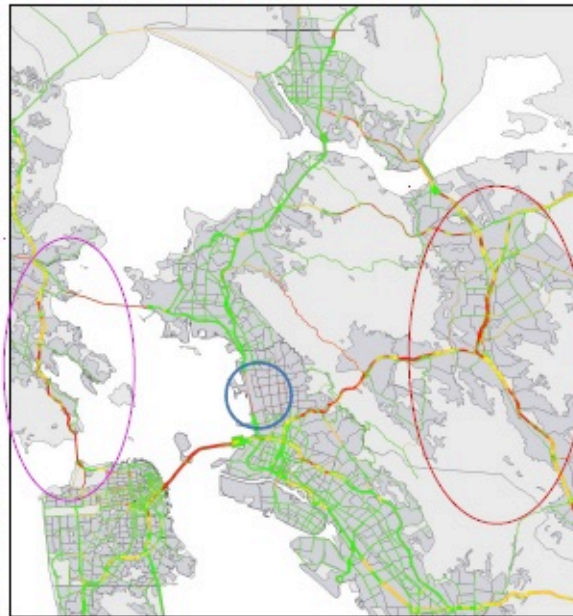
# CLIMATE ADAPTATION: INTERDEPENDENCE AND MULTILEVEL COOPERATION

Panel 1: Community Clustering



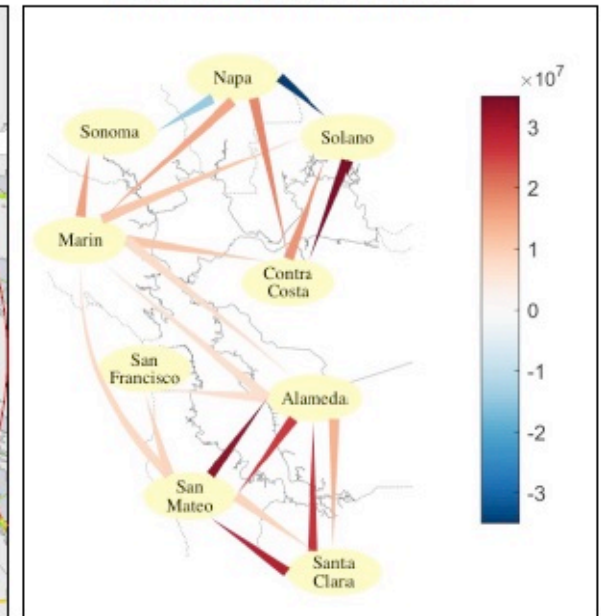
Shared Experience

Panel 2: Regional Traffic Response



Vulnerability Interdependence

Panel 3: Physical Interactions



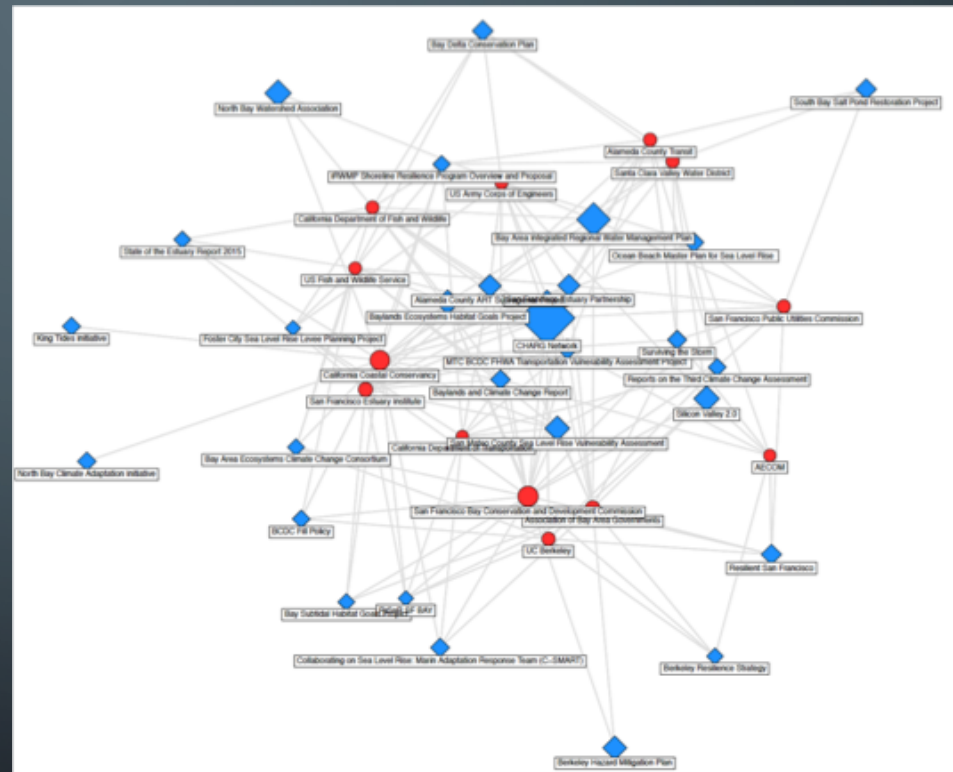
Adaptation Interdependence

Not shown: Policy interdependence

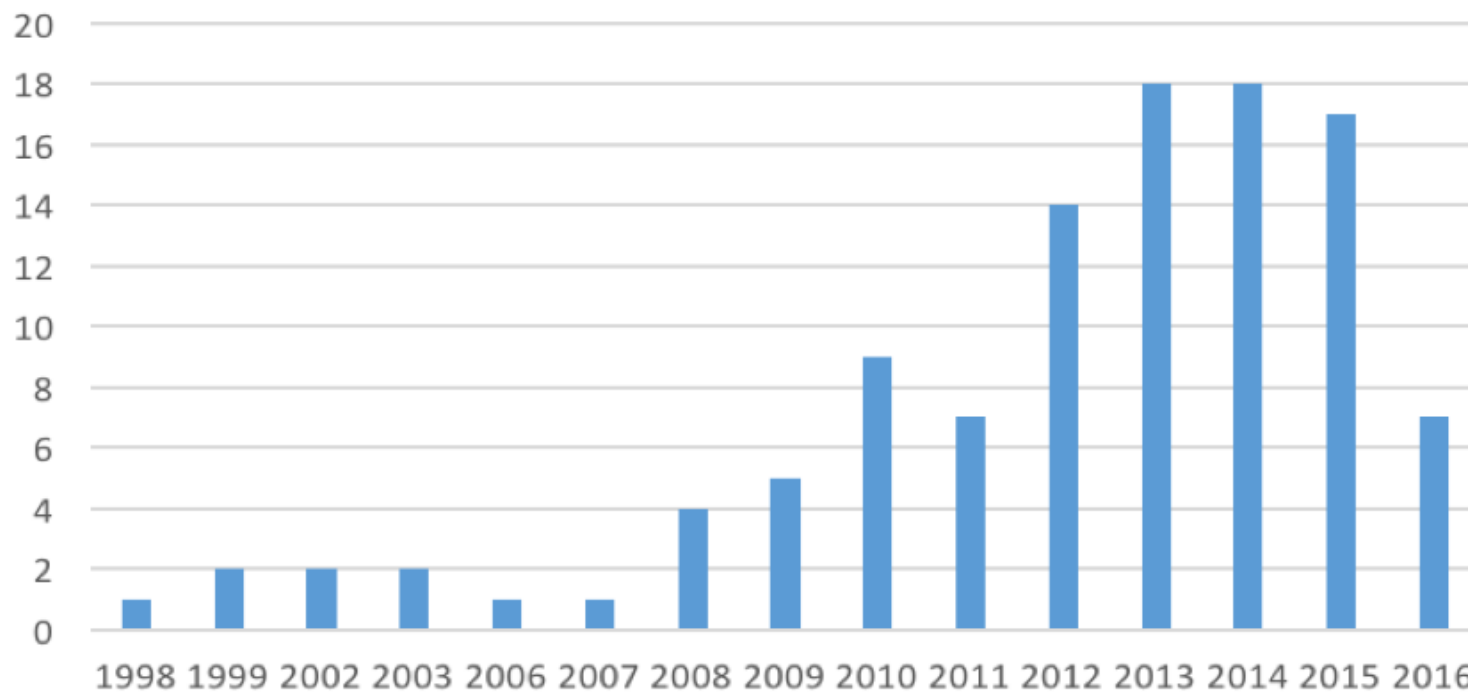
## THE GOVERNANCE CHALLENGE: COOPERATION AND LEARNING IN COMPLEX SYSTEMS

***Public policy is almost always a mess. Let's acknowledge the inevitable and figure out how to manage a messy situation.*** Trying to define a policy “problem” is hard enough. Trying to find a solution is even harder. Trying to do either in a policy-making structure in which everyone is involved, but nobody is in charge, is nearly impossible.

Phil Isenberg, 2016



## Adaptation Project by Inception Date



Period 1: 1998-2007

Period 2: 2008-2012

Period 3: 2013-2016

# GOVERNANCE RESEARCH APPROACH

- Multi-level interviews from regional to local, government and non-governmental stakeholders
- 43 individuals interviewed at average of 1 hour each.
- Governance Solutions focus groups: North Bay, South Bay, Central Bay
- Report 2017: “The Governance Gap: Climate Adaptation and Sea-Level Rise in the San Francisco Bay Area”



# THE OVERALL GOVERNANCE CHALLENGE: MULTI-LEVEL COOPERATION

- Widespread agreement that sea-level rise is significant problem(uncertainties: How bad? When?)
- Widespread agreement that mix of green and gray infrastructure is needed (uncertainties: Will green infrastructure work?)
- Emerging awareness of interdependency and need for regional approach
- Widespread disagreement on how to create governance institutions to achieve multi-level regional cooperation

The slide features a dark blue background with decorative white lines in the corners that resemble circuit board traces or neural network connections. These lines are composed of small circles connected by straight segments, creating a geometric pattern in the top-left, top-right, bottom-left, and bottom-right corners.

# SPECIFIC GOVERNANCE CHALLENGES

- Institutions for multi-level cooperation
- Planning
- Funding portfolio
- Climate science enterprise
- Integrated permitting
- Civic engagement
- Political leadership

Bay Area Climate Adaptation Governance Challenges	Proposed Solution Concepts
Institutions for Multi-Level Cooperation	<ol style="list-style-type: none"> <li>1. Shared governance (“stay in your own lane”)</li> <li>2. Lead agency (BCDC or other existing agency)</li> <li>3. New “network” administrative agency (e.g.; Delta Stewardship Council)</li> <li>4. <b>Climate Adaptation Vision or Commission (e.g. Delta Vision, Governor’s Commission for a Sustainable South Florida, Western Water Commission)</b></li> <li>5. Institutional consolidation: special districts, regional governing boards</li> </ol>
Climate Adaptation Planning	<ol style="list-style-type: none"> <li>1. Update existing regional (SB375, Plan Bay Area, SF Bay Plan, other) and local plans (general plans, congestion management plans, local climate adaptation plans)</li> <li>2. Overall regional climate adaptation plan</li> <li>3. Separate but linked new plans for specific issues—sea level rise, temperature, drought</li> <li>4. <b>Vision Plan and next step recommendations</b></li> </ol>
Funding Portfolio	<ol style="list-style-type: none"> <li>1. Federal: special legislation, WRDA, transportation funding</li> <li>2. State: Transportation and bond money, special legislation</li> <li>3. <b>Regional/Local: parcel taxes, increases in fees, special taxation districts</b></li> <li>4. <b>Public-private partnerships</b></li> </ol>
Integrated Permitting	<ol style="list-style-type: none"> <li>1. Expand scope of Long Term Management Strategy for Dredging and associated Dredged Materials Management Office</li> <li>2. <b>Create new integrated permitting strategy for green infrastructure</b></li> <li>3. Habitat Conservation/Natural Communities Conservation Plan</li> <li>4. Programmatic CWA Section 404, ESA Section 7, and other permits</li> </ol>
Climate Science Enterprise	<ol style="list-style-type: none"> <li>1. Create centralized web portal for all climate science information</li> <li>2. <b>Climate science services center (data and assistance/guidance) hosted at agency, university, NGO, or consortium</b></li> <li>3. Internal independent science review board</li> <li>4. External National Academy of Science review panel (e.g. Committee on Independent Scientific Review of Everglades Restoration Progress)</li> </ol>
Civic Engagement	<ol style="list-style-type: none"> <li>1. <b>Community-based adaptation meetings (e.g. Southern Marin Pilot Project)</b></li> <li>2. <b>Collaborate with cultural institutions (e.g.; museums, schools, NGOs)</b></li> <li>3. <b>Digital, alternative, and traditional media marketing</b></li> <li>4. <b>Citizen science and in situ visualizations</b></li> <li>5. <b>Climate Leadership Training Academy</b></li> </ol>
Political Leadership	<ol style="list-style-type: none"> <li>1. <b>Create state and federal legislative caucus groups focused on climate adaptation</b></li> <li>2. Governor-sponsored regional climate adaptation dialog sessions</li> <li>3. Legislative staff outreach task force</li> </ol>



# RECOMMENDATIONS

- Institutions: Climate Adaptation Vision or Commission (e.g. Delta Vision, Governor's Commission for a Sustainable South Florida, Western Water Commission)
- Planning: Vision Plan and next step recommendations
- Funding: “Local first” funding portfolio: parcel taxes, increases in fees, special taxation districts
- Permitting: Create new integrated permitting strategy for green infrastructure
- Science/Policy: Climate science services center (possible legislative target)
- Civic engagement: Integrated strategy from in-person to digital
- Political leadership: Create state and federal legislative caucus groups focused on climate adaptation (legislative relations staff)

## NEXT STEPS

- Network analysis based on documents
- Public opinion survey of Bay Area households
- Bay Area decision-maker survey (YOUR HELP NEEDED! INVITE US TO MEETINGS! PROVIDE CONTACT LISTS! REVIEW, PROMOTE AND ANSWER SURVEY!)

